

Applicants: Adam J. Simonoff *et al.*
Serial No. : 10/750,632
Filed : December 19, 2003
Page : 2 of 14

Attorney Docket No.: Navy Case 84734

Amendments to the Specification:

Please replace the paragraph at page 3 lines 10-18 (corresponding to paragraph [0007] in U.S. Patent Application Publication 2005/0138601) with the following rewritten paragraph:

Preferably, the graphically represented code objects are centrally stored and accessed from one or more servers on a network. The user may thus access the objects from within the white board area that may be instantiated within an Internet web browsing program. Embodiments of the invention may be implemented so as to be browser-independent, too, by utilizing the Java-JAVA[®] programming language technology, or another type of programming language technology that does not require a specific brand of web browsing program. Similarly, by utilizing Java-JAVA[®] technology or another type of technology, embodiments of the invention may be architecture and operating system independent.

Please replace the paragraph at page 5 line 21 – page 6 line 13 (corresponding to paragraph [0020] in U.S. Patent Application Publication 2005/0138601) with the following rewritten paragraph:

A multiple-user graphical programming and analysis environment 108 runs as one or more programs on the servers 102, as is described in more detail later in the detailed description. The clients 104 run web browsing programs 110A, 110B, ..., 110N, collectively referred to as the web browsing programs 110. The web browsing programs 110 may be versions of the ~~Internet Explorer~~ INTERNET EXPLORER[®] web browsing program, available from Microsoft Corp., of Redmond, Wash., or other types of web browsing programs, as known to those of ordinary skill within the art. The users of the clients 104 are able to access and interact with the environment 108 running on the servers 102 via the web browsing programs 110, over the network 106. The clients 104 also run operating systems in conjunction with which the web browsing programs 110 run. Such operating systems may include versions of the ~~Windows~~ WINDOWS[®] operating

Applicants: Adam J. Simonoff *et al.*
Serial No. : 10/750,632
Filed : December 19, 2003
Page : 3 of 14

Attorney Docket No.: Navy Case 84734

system, available from Microsoft Corp., versions of the ~~Macintosh~~ MACINTOSH[®] operating system, available from Apple, Inc., of Cupertino, Calif., as well as versions of the UNIX[®] operating system and versions of the ~~Linux~~ LINUX[®] operating system. Instantiations of the environment 108 are run within the web browsing programs of the clients 104, as the environments 108A', 108B', ..., 108N', collectively referred to as the environments 108'.

Please replace the paragraph at page 7 lines 3-12 (corresponding to paragraph [0022] in U.S. Patent Application Publication 2005/0138601) with the following rewritten paragraph:

The environment 108 may further be a computer program coded in the ~~Java~~ JAVA[®] programming language, initially developed by Sun Microsystems, Inc., of Santa Clara, Calif. The environment 108 may include areas 202, 204, and 206 that may be separately coded as JAVA[®] objects. An applet program is generally defined as a small application computer program. The utilization of the ~~Java~~ JAVA[®] technology, or a similar type of computer programming technology, allows for the environment 108 to be accessed in a browser-neutral and architecture-independent manner. That is, the type or brand of the clients 104 of FIG. 1 and the type or brand of the web browsing programs 110 running thereon do not have to be specified, so long as these clients 104 and these programs 110 are capable of running ~~Java~~ JAVA[®] or similar type of technology.

Please replace the paragraphs at page 9 lines 12 – page 10 line 20 (corresponding to paragraphs [0027] – [0029] in U.S. Patent Application Publication 2005/0138601) with the following rewritten paragraphs:

The results of execution of the program 210 may be able to be reported over such a network. Security privilege-filtered results of execution of the application program 210 may further be able to be reported over such a network. Security privilege-filtered results are results that are filtered so that only the data that a given user ~~has~~ have the appropriate security privileges to view and access are provided to that user. A user with the highest security privileges may not

Applicants: Adam J. Simonoff *et al.*
Serial No. : 10/750,632
Filed : December 19, 2003
Page : 4 of 14

Attorney Docket No.: Navy Case 84734

have any of the results filtered out when viewing the results. By comparison, a user with the lowest security privileges may only be able to view a small portion of the results, such that the other portions of the results are filtered out and not viewable by this user.

The inter-code object connections 214 are creatable, definable, and movable within the white board area 202. Security privileges may restrict which data ~~is~~are transferred across the inter-code object connections. Security privileges may restrict some users' awareness that inter-code objects exist. Each of the connections 214 represents data transfer between a pair of code objects. For instance, the connection 214A represents data transfer between the objects 212A and 212B, and the connection 214B represents data transfer between the objects 212B and 212C. An inter-code object connection can represent data being sent from a sender object and being received by a receiver object of the pair of code objects connected by the inter-code object connection. Furthermore, more than one inter-code object connection may be specified between a pair of code objects, such that each object may function as both a sender object and a receiver object relative to the other object.

The inter-code object connections 214 further may graphically terminate on edges and/or interiors of the code objects 212. The data represented by an inter-code object connection may be user defined, and may also be filtered and/or modified according to the privileges according to the users. For instance, a user may define the type of data that ~~is~~are transmitted and received via an inter-code object connection. However, that same user may not have the appropriate security privileges to actually access or view the data, whereas another user may have greater security privileges that enable him or her to access and view the data. Additionally, the inter-code object connections 214 may be graphically invisible and/or purposefully limited in their functionality for security reasons, in accordance with the security privileges accorded to the users. The connections 214 may be represented as lines and/or directed graphs.

Applicants: Adam J. Simonoff *et al.*
Serial No. : 10/750,632
Filed : December 19, 2003
Page : 5 of 14

Attorney Docket No.: Navy Case 84734

Please replace the paragraph at page 11 line 17 – page 12 line 6 (corresponding to paragraph [0032] in U.S. Patent Application Publication 2005/0138601) with the following rewritten paragraph:

The code object 300 may be interconnected with other graphically represented code objects via the input 302 and the output 304 of the object 300. A graphically represented inter-code object connection may connect the output of a second object to the input 302 of the object 300. Furthermore, another inter-code object connection may connect the input of a third object to the output 304 of the object 300. This means that the second object generates data that ~~is~~ are transferred therefrom to the input 302 of the code object 300. The internal logic 306 of the code object 300 processes the data that ~~is~~ are input, and outputs data on the output 304. The data ~~output out~~ on the output 304 is ~~are~~ then input into the third object, which may perform further processing of the data. In this way, application programs made up or composed of chains of code objects may be created by interconnecting the code objects via inter-code object connections.